



Vocabulary Review on Genes

Name: _____

Date: _____

In the following statements, G represents the dominant gene for curly hair and g represents the recessive gene for straight hair.

Part A

Check the answer that correctly completes each statement. Make sure you can explain your answer.

If an ovule G and a sperm cell G unite:

1. the genotype of the resulting zygote will be:

- GG gg Gg

2. the zygote will be:

- heterozygous homozygous

3. the resulting human will have the following phenotype:

- curly hair straight hair part curly, part straight hair

4. the resulting human will be able to produce the following gametes:

- G g G or g

If an ovule g and a sperm cell g unite:

5. the genotype of the resulting zygote will be:

- GG gg Gg

6. the zygote will be:

- heterozygous homozygous

7. the resulting human will have the following phenotype:

- curly hair straight hair part curly, part straight hair

8. the resulting human will be able to produce the following gametes:

- G g G or g

If an ovule G and a sperm cell g unite:

9. the genotype of the resulting zygote will be:

- GG gg Gg

10. the zygote will be:

- heterozygous homozygous

11. the resulting human will have the following phenotype:
 curly hair straight hair part curly, part straight hair

12. the resulting human will be able to produce the following gametes:
 G g G or g

If an ovule g and a sperm cell G unite:

13. the genotype of the resulting zygote will be:
 GG gg Gg

14. the zygote will be:
 heterozygous homozygous

15. the resulting human will have the following phenotype:
 curly hair straight hair part curly, part straight hair

16. the resulting human will be able to produce the following gametes:
 G g G or g

Part B

State your answer to the following questions in the form of a fraction or as a percentage.

17. If a father (GG) and a mother (gg) have children, what will be the expected proportions of the following genotypes?

GG _____ gg _____ Gg _____

18. If a father (gg) and a mother (Gg) have children, what will be the expected proportions of the following genotypes?

GG _____ gg _____ Gg _____

19. If a father (Gg) and a mother (GG) have children, what will be the expected proportions of the following genotypes?

GG _____ gg _____ Gg _____

20. If a father (Gg) and a mother (Gg) have children, what will be the expected proportions of the following genotypes?

GG _____ gg _____ Gg _____